



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,685	02/05/2002	Dana W. Seniff	P48-1305-1	8778

7590 04/12/2005
McCormick, Paulding & Huber
City Place II
185 Asylum Street
Hartford, CT 06103-3402

EXAMINER

PRONE, JASON D

ART UNIT	PAPER NUMBER
3724	

DATE MAILED: 04/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/068,685	Applicant(s) SENIFF ET AL.	
	Examiner Jason Prone	Art Unit 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3724

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "coating blanket", of claim 1, the "tip portion sensor" and "adjusting means" of claim 2, and the "pressure sensor" and "pressure adjusting means", of claim 4, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 3724

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the "periphery of the coating blanket" as described in the specification. On page 8 lines 12-13, the specification states "These intermittent slits are cut around the periphery of the coating blanket in a particular order". This periphery should be represented in Figure 5. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

Art Unit: 3724

3. The specification is objected to under 37 CFR 1.71, as being confusing and difficult to comprehend the invention and compare with prior art. For example, the following is not understood: It is unclear what the coating blanket is in relation to the coating blanket material, the flexible material, and the carrier layer. It is unclear what structure the coating blanket incorporates. It is unclear how the reference point/surface allows for cutting depth control. It is unclear how the reference point/surface evaluates knife wear. It is unclear how the cutting of the flexible and carrier layers is performed. See the rejections under 35 USC § 112, first paragraph for more details

Applicant is required to submit an amendment which clarifies the disclosure so that the examiner may make a proper comparison of the invention with the prior art.

Applicant should be careful not to introduce any new matter into the disclosure (i.e., matter which is not supported by the disclosure as originally filed).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-5 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It is unclear what the coating blanket is in relation to the coating blanket material, the flexible material, and the carrier layer. It is unclear what structure the coating

Art Unit: 3724

blanket incorporates. The coating blanket is not shown in the Figures and is not described on page 6 lines 3-13 when the material is described. Also the structure of the coating blanket is uncertain. On page 8 lines 16-18, the phrase "a second pair of lateral edges 58, which together with the first pair of lateral edges coact to define the periphery of the coating blanket" is unclear. First items "56" and "58" represent a pair, so there should be four edges total. Items "56" and "58" are pointing to individual slits 54. It is unclear if the single slit that is being pointed to by each "56" and "58" is considered the lateral edge. In light of items "56" and "58" pointing to individual slits 54, it is unclear how the slits and the lateral edge can be the same thing when the specification clearly states that the "slits 54 are cut around the periphery of the coating blanket" (Page 8 lines 12-13)

It is unclear how the cutting of the flexible and carrier layers is performed. On page 8 lines 1-4 clearly states that a graphic is cut with a single pass that does not contact the carrier layer. Keeping in mind the uncertainty regarding the periphery above, it is unclear how the periphery is formed. It is not certain if this periphery is formed the same way the graphic is cut out or if the periphery is pre-made. It is unclear how the slits are formed in the carrier layer. In light of the statement "slits 54 are cut around the periphery", it is uncertain how the slits are formed without going through the flexible layer. It is uncertain if the multiple passes of the blade starts in the flexible layer and continues until the carrier layer is completely cut or if the carrier layer is cut from beneath prevent additional cuts to the flexible material. Also, since the slits are around

the periphery, the knife could not go through the periphery to create the slits due to the fact that the slits and the periphery should not be lined up.

On page 7 bottom of the only full paragraph, the phrases "this sensor reference point allows for precise cutting depth control during a cutting operation" and "The location of the knife can then be subsequently adjusted to ensure that the proper cuts are made in the coating blanket" are unclear. First it is unclear how the reference point allows for precise cutting depth control. The reference point is just that "a point". It is understood that this point could help a sensor determine the distance the cutter moves until it hits the reference surface but it is unclear how this reference point by itself would allow for a specific cutting depth to be performed especially when it is beneath the work piece. How can the reference point itself differentiate between the depth required to cut the slits and the depth required to cut out the graphic? If the reference point allows for depth control, why can the location of the knife can then be subsequently adjusted to ensure that the proper cuts are made in the coating blanket. Also, on lines 13-14, the phrase "This location is then sensed by either sensors on or adjacent the reference surface or by an optical encoder positioned on the cutting head" states that it is a sensor of some kind that does the locating. Although it is unclear how the sensor works and what structure it incorporates, it would seem that the depth control would be done by the sensor means and not by the reference surface.

On page 7 line 23, the "pressure sensor" is unclear. It is uncertain what structure this sensor incorporates and how it controls the depth of the cut. This sensor is not disclosed in the Figures.

Art Unit: 3724

On page 7 lines 16-19, it is unclear how the reference surface determines knife-wear or if the tip of the knife is no longer present. No structure has been disclosed that would allow the reference surface to evaluate or control any type of function. From the specification this reference surface/point is only a surface. It appears from Figure 1, that the reference surface/point is only on the right side, so at best it the only function the reference surface/point could perform is it could help line up the cutting side with the right side of the frame.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regards to claim 1 line 6 and claim 2 line 6, both claims disclose the phrase "a reference surface". It is unclear if the reference surface of claim 2 is the same structure as the reference surface of claim 1.

In regards to claim 1 lines 26-27, the phrase "controller that considers a reference during the cutting operation" is unclear. It is uncertain what structure allows the controller to consider anything. On lines 14-15, the phrase "programming said controller with graphic cutting data and carrier layer data" clearly discloses how the controller receives information. It is also unclear what the "reference" that is being considered by the controller actually is.

Art Unit: 3724

In regards to claim 1 lines 33, the term "coating blanket" is unclear. It is uncertain if the coating blanket is the same structure as the previously disclosed flexible material.

In regards to claim 2 lines 8-9, the phrase "sensing the location of said tip portion and thereby said blade upon touching the reference surface" is unclear. It is uncertain what structure is capable of performing this sensing function.

In regards to claim 2 lines 14-15, the phrase "adjusting an amount by which said tip portion of the cutting blade extends into said work material in accordance with said sensed location" is unclear. It is uncertain what structure is capable of performing an adjustment function.

In regards to claim 3 line 15 and claim 5 line 5, both claims disclose the phrase "a plurality of second spaced apart slits". It is unclear if the plurality of second spaced apart slits of claim 5 is the same structure as the plurality of second spaced apart slits of claim 3.

In regards to claim 4 lines 8-9, the phrase "sensing the amount of pressure exerted by said cutting blade in a direction approximately normal to said work material" is unclear. It is uncertain what structure is capable of performing this sensing function.

In regards to claim 4 lines 10-11, the phrase "adjusting said pressure to cut through said flexible material in a single pass and into said carrier layer a desired amount on each of said multiple cutting passes" is unclear. It is uncertain what structure is capable of performing an adjustment function.

In regards to claim 5 and assuming that "opposed edges" are the same edges that make up the periphery that is unclear, it is not certain what the "areal portions" are. That being said it is uncertain how these areal portions are scored. It is also unclear if this scoring is in addition to the slit and graphic cutting.

8. It is to be noted that claims 1-5 have not been rejected over prior art. It may or may not be readable over the prior art but cannot be determined at this time in view of the issues under 35 USC § 112.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Prone whose telephone number is 571-272-4513. The examiner can normally be reached on 7:30-5:00, Mon - (every other) Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 571-272-4514. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

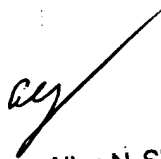
Application/Control Number: 10/068,685

Page 10

Art Unit: 3724



JP
April 06, 2005



Allan N. Shoap
Supervisory Patent Examiner
Group 3700